

### **Remarks**

Claims 17-32 and 34-62 were pending in the Application. All of the pending claims were rejected in the Office Action. Claims 37-39, 45, 47, 52, 54, 58 and 59 have been amended and claims 63-69 have been added. Claims 17-32 and 34-69 are now pending with claims 17, 27, 32, 37, 47, 54, 63, 66 and 69 being the independent claims. It is submitted that claims 17-32 and 34-69 are allowable for at least the reasons described below.

The Examiner rejected claims 37-62 under 35 USC 102 as being anticipated by *Arazi et al.* (U.S.P. 5,966,120); claims 17-22, 27-29, 32, 33, 35 and 36 under 35 U.S.C. §103(a) as being unpatentable over *Hendricks et al.* (U.S.P. 6,463,585) in view of *Arazi et al.*; and claims 23-26, 30, 31, and 34 under 35 U.S.C. §103(a) as being unpatentable over *Hendricks et al.* and *Arazi et al.* in view of *Schoenblum et al.* (U.S. P. 6,418,122). The Applicant amended claims 37-39, 45, 47, 52, 54, 58 and 59 to further clarify the invention and added claims 63-69. The Applicant submits that claims 17-32 and 34-69 are patentable over the cited references for at least the reasons discussed below.

Independent claim 17 is directed to a method for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The method includes transmitting advertisements within an advertisement channel to subscribers in advance of presentation of the advertisements to the subscribers. The advertisements are transmitted at a bit rate that is less than the bit rate required to present the advertisements in real time. The advertisements are stored in a storage medium.

It is submitted that none of the cited references, whether taken alone or in any reasonable, combination disclose or suggest the embodiment recited in claim 17. For example, none of the cited references disclose, teach or suggest transmitting advertisements to subscribers at a bit rate that is less than the bit rate required to present the advertisements in real time, as required by claim 17.

To the contrary, *Hendricks et al.* disclose delivering targeted advertising to subscribers in one of four methods: (1) multiple channel method, (2) storage method, (3) additional bandwidth method, and (4) split screen method (see col. 72, line 64 – col. 73, line 1). All of these methods except the storage method include displaying the ads in real time. The storage method is silent as to how the ads are stored in the STB. In fact, on page 5 of the Office Action the Examiner acknowledges that *Hendricks et al.* do not disclose “the advertisements are transmitted at a bit rate that is less than the bit rate required to present the advertisement in real-time”. The Examiner appears to rely on *Arazi et al.* (col. 3, lines 45-64; col. 4, lines 7-21; and col. 6, lines 12-34) for disclosure of this feature.

Initially the Applicant points out that *Arazi et al.* do not disclose or suggest an ad channel, let alone an ad channel that delivers advertisements at a bit rate that is less than the bit rate required to present the advertisements in real time, as recited in claim 17. Rather, *Arazi et al.* disclose inserting auxiliary data (which is possibly ads) in place of fill packets to create a CBR data stream (see col. 4, lines 1-6). The auxiliary data is “inserted inbetween the packets of the primary programs whenever the distribution channel is idle for a time interval that is at least as long as the time interval needed to transmit the next packet of auxiliary data.” (see col. 4, lines 25-29). A channel is not created for the transmission of auxiliary data, rather the auxiliary data is inserted in place of fill packets. Moreover, as ads are but one possibility for the auxiliary data the insertion of the auxiliary data is clearly not an ad channel, as recited in claim 17.

Furthermore, the motivation provided by the Examiner for combining *Hendricks et al.* and *Arazi et al.* is erroneous. The Examiner claims that the motivation would be “its advantage of reducing storage capacity requirements at either the headend or at server site (col. 1/lines 37-53)”. Initially, the Applicant points out that by reducing the bit rate so that the ads can not be displayed in real time would require that the ads be stored (as opposed to presented in real time) which would actually require additional memory. Moreover, most embodiments of *Hendricks et al.* actually require that the ads be delivered so that they can be presented in real time (on feeder channels that are switched to) so that combining with *Arazi et al.* would diminish if not destroy the functionality of *Hendricks et al.*

The one embodiment (storage method) of *Hendricks et al.* that stores ads does not disclose or suggest how the ads that are stored are received. There is clearly no suggestion in *Hendricks et al.* that the ads can be received at a low bit rate and then stored for later use. In fact, the storage method discloses that the method “has the advantage of not requiring additional feeder channel to continuously broadcast targeted advertising” (see col. 74, lines 14-16) which appears to infer that at least one feeder channel is used (possibly to deliver the ads that are stored). Moreover, *Arazi et al.* does not provide any motivation as to why the references should be combined.

The Examiner does not rely on *Schoenblum et al.* for disclosing the features of claim 17 that are deficient in the teachings of *Hendricks et al.* and *Arazi et al.* *Schoenblum et al.* disclose a system that determines the bit rate of stream and compares the bit rate of the stream to available bandwidths (see Abstract and col. 10, lines 33-63). When a “panic condition” occurs, the condition that the bit rate is higher than an available bandwidth, non-anchor pictures are replaced with glue pictures utilizing less bandwidth than the replaced pictures. Thus, *Schoenblum et al.* fails to teach or suggest transmitting advertisements within an advertisement channel. The Applicant submits that *Schoenblum et al.* do not disclose or suggest these deficiencies.

For at least the reasons identified above it is submitted that claim 17 is patentable over *Hendricks et al.*, *Arazi et al.* and *Schoenblum et al.* Claims 18-26 depend from claim 17 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 17 and for the further features recited therein. The rejection of claims 17-26 accordingly should be withdrawn.

Independent claim 27 is directed to a system for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The system includes a transmitter for transmitting the advertisements to the subscribers within an advertisement channel in advance of presentation of the advertisements to the subscribers. The advertisements are transmitted at a bit rate that is less than the bit rate required to present the advertisements in real time. A storage medium stores the advertisements. A display device interface allows the advertisements to be presented to the subscribers.

It is submitted that claim 27 is patentable over the cited references for at least reasons similar to those described above with respect to claim 17. Claims 28-31 depend from claim 27 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 27 and for the further features recited therein. Accordingly the rejection of claims 27-31 should be withdrawn

Independent claim 32 is directed to a method for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The method includes forming a subgroup of subscribers that share one or more common subscriber characteristics. Targeted advertisements are selected to be transmitted to the subgroup. The targeted advertisements are transmitted to the subgroup within an advertisement channel in advance of presentation of the advertisements to the subscribers. The targeted advertisements are transmitted at a bit rate that is less than the bit rate required to present the targeted advertisements in real time. The targeted advertisements are stored in a storage medium.

It is submitted that claim 32 is patentable over the cited references for at least reasons similar to those described above with respect to claim 17. Claims 34-36 depend from claim 32 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 32 and for the further features recited therein. Accordingly the rejection of claims 32 and 34-36 should be withdrawn.

Claim 37 is directed to a method for receiving advertisements for storage. The method includes receiving an ad channel containing advertisements over same medium as content is received. The advertisements are transmitted over the medium at a low bit rate. The advertisements are stored in a storage medium. Claim 37 was amended to clarify that the ads are received within an ad channel.

As discussed above with respect to claim 17, *Arazi et al.* do not disclose or suggest an ad channel, let alone an ad channel transmitting ads at a low bit rate. As each and every element and each and every relationship are clearly not taught a prima facie case of anticipation is clearly not established. Moreover, as discussed above neither *Hendricks et al.* nor *Schoenblum et al.*

discloses or suggests an ad channel transmitting ads at a low bit rate. Furthermore, for the reasons addressed above with respect to claim 17 there is no motivation to combine the references.

Accordingly, it is submitted that claim 37 is patentable over the cited references for at least the reasons advanced above. Claims 38-46 depend from claim 37 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 37 and for the further features recited therein. Accordingly, claims 37-46 are submitted to be patentable over the art of record.

Claim 47 is directed to a method for transmitting advertisements to subscribers for storage. The method includes transmitting at least one content stream to a subscriber over a medium and a determination as to bandwidth available after said transmitting at least one content stream is made. An ad channel containing advertisements is transmitted to the subscriber over the medium. The advertisements are transmitted at a low bit rate that is based on the available bandwidth. The advertisements are stored for possible later presentation to the subscribers. Claim 47 was amended to clarify that the ads are transmitted within an ad channel.

It is submitted that claim 47 is patentable over the cited references for at least reasons similar to those described above with respect to claim 37. Claims 48-53 depend from claim 47 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 47 and for the further features recited therein. Accordingly, claims 47-53 are submitted to be patentable over the art of record.

Claim 54 is directed to a method for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The method includes transmitting content to subscribers over a delivery network. A determination is made as to remaining bandwidth available in the delivery network after transmitting the content. An ad channel containing advertisements are transmitted to the subscribers within the remaining bandwidth available in the delivery network. The advertisements are transmitted at a low bit rate. The

advertisements are stored in the storage medium for possible later presentation to the subscribers. Claim 54 was amended to clarify that the ads are transmitted within an ad channel.

It is submitted that claim 54 is patentable over the cited references for at least reasons similar to those described above with respect to claim 37. Claims 55-62 depend from claim 54 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 54 and for the further features recited therein. Accordingly, claims 54-62 are submitted to be patentable over the art of record.

Newly added claim 63 is directed to a method for receiving advertisements within an ad channel and storing the advertisements for possible later presentation. The method includes receiving an ad channel and at least one content channel over a medium. The medium has a predefined bandwidth and the at least one content channel utilizes at least a portion of the predefined bandwidth of the medium based at least in part on bit rate of content. The ad channel utilizes bandwidth remaining after the at least one content channel. The remaining bandwidth supporting a bit rate less than bit rate necessary for real time display of advertisements within the ad channel. The advertisements received from the ad channel are stored in a storage medium.

It is submitted that none of the cited references, whether taken alone or in any reasonable, combination disclose or suggest the embodiment recited in claim 63. For example, none of the cited references disclose, teach or suggest an ad channel utilizing remaining bandwidth that supports a bit rate less than bit rate necessary for real time display of advertisements, as required by claim 63. Accordingly claim 63 and claims 64 and 65 that depend therefrom are submitted to be patentable over the prior art of record.

Newly added claim 66 is directed to a method for transmitting advertisements in an ad channel for possible later presentation. The method includes selecting content to be transmitted over a medium within at least one content channel. Bandwidth required to transmit the content within the at least one content channel at a bit rate sufficient for real time presentation is determined. A determination of remaining bandwidth for the medium is made. A transmission channel is generated that includes the at least one content channel and an ad channel. The ad

channel utilizes the remaining bandwidth. The transmission channel is transmitted. The remaining bandwidth supports a bit rate less than bit rate necessary for real time display of advertisements within the ad channel.

It is submitted that none of the cited references, whether taken alone or in any reasonable, combination disclose or suggest the embodiment recited in claim 66. For example, none of the cited references disclose, teach or suggest an ad channel utilizing remaining bandwidth that supports a bit rate less than bit rate necessary for real time display of advertisements, as required by claim 66. Accordingly claim 66 and claims 68 and 68 that depend therefrom are submitted to be patentable over the prior art of record.

Newly added claim 69 is directed to a method for receiving advertisements within an ad channel and storing the advertisements for possible later presentation. The method includes generating a statistically multiplexed stream having an ad channel and at least one content channel over. The statistically multiplexed stream has a predefined bandwidth and the at least one content channel utilizes at least a portion of the predefined bandwidth based at least in part on bit rate of content. The ad channel utilizes bandwidth remaining after the at least one content channel. The statistically multiplexed stream is transmitted. The remaining bandwidth supports a bit rate less than bit rate necessary for real time display of advertisements within the ad channel.

It is submitted that none of the cited references, whether taken alone or in any reasonable, combination disclose or suggest the embodiment recited in claim 69. For example, none of the cited references disclose, teach or suggest an ad channel utilizing remaining bandwidth that supports a bit rate less than bit rate necessary for real time display of advertisements, as required by claim 63. Accordingly claim 69 is submitted to be patentable over the prior art of record.

## Conclusion

For the foregoing reasons, Applicant respectfully submits that claims 17-32 and 34-69 are in condition for allowance. Accordingly, early allowance of claims 17-32 and 34-69 is earnestly solicited.

If the Examiner believes that a conference would be of value in expediting the prosecution of this Application, the Examiner is hereby invited to contact the undersigned attorney to set up such a conference.

Respectfully submitted,



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Date: 10/7/2007

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